

Failure to show all work and write in complete sentences will result in LaSalle!

1) $4i(9i) =$	2) $4i(-6 + i) =$	3) $(-2i)^4$
4) $3i^2(-i^{15})(-5i)$	5) $-4i^2(3i^3)(-5i)$	6) $(9 - 2i)(-4 + 7i)$
7) $(2 - 3i)(2 + 3i)$	8) $(-3 + 4i)^2$	9) $(1 - i)^2$
10) $2(6 - i) + i(3 - i) =$ A. $13 - 6i$ B. $11 + i$ C. $11 - 6i$ D. $13 + i$	11) $5 + i(3i) =$ A. 2 B. 8 C. $5 + 3i$ D. $5 - 3i$	12) $2i(5 - 3i) + 4(2i) =$
13) Which real number is equivalent to $i^4$ ? A. -1 B. $\sqrt{-1}$ C. 1 D. 4 E. There is no equivalent real number	14) Which real number is equivalent to $i^9$ ? A. -1 B. $\sqrt{-1}$ C. 1 D. 9 E. There is no equivalent real number	15) Which real number is equivalent to $i^{12}$ ? A. -1 B. $\sqrt{-1}$ C. 1 D. 9 E. There is no equivalent real number

1) What are the roots of the equation  $p^2 - 36$ ?

2) What is the sum of the solutions to  $16x^2 - 49$ ?

3) Simplify:  $4^2 + 4^1 + 4^{-1}$

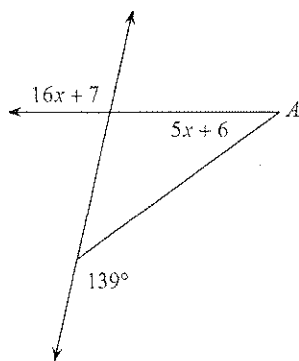
4) Simplify:  $\frac{(2x^2y)^3}{3(x^{-2}y^4)^2}$

5)  $x = \{-6, 3\}$  is the solution set for which of the following quadratic equations?

6) A circle has a circumference of  $5\pi$  ft. What is its area?

- a.  $x^2 + 3x - 18 = 0$
- b.  $x^2 + 6x - 18 = 0$
- c.  $x^2 + 3x + 18 = 0$
- d.  $x^2 - 6x + 3 = 0$
- e.  $x^2 - 3x + 18 = 0$

7) Find the measure of angle A:



8) Use segment addition postulate to find lengths of segments

Find  $LM$ .

